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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,461	09/19/2003	John Paul Maye	61844(51035)	8336

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EDWARDS ANGELL PALMER & DODGE LLP  
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BOSTON, MA 02205

EXAMINER
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JOYNER, KEVIN

ART UNIT	PAPER NUMBER
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1797

MAIL DATE	DELIVERY MODE
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01/23/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

### Application No.

10/666,461

### Applicant(s)

MAYE, JOHN PAUL

### Examiner

Kevin C. Joyner

### Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 4,6-10 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4, 6-10 and 12-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 8, 2007 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4, 6, 8, 9 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barney et al. (U.S. Patent No. 5,455,038) in view of Lutz et al. (U.S. Publication No. 2004/0091558).

Barney discloses a method and apparatus of using hop acids as an antimicrobial agent (column 1, lines 16-18) in a food packaging material (column 2, lines 13-15), comprising: delivering the hop acids in a medium used in controlling microorganisms such as *Listeria monocytogenes* (column 3, lines 34-67), wherein the hop acids are

mixed with the medium in an amount to inhibit microbial agents (column 1 lines 61-64). Barney does not appear to disclose that the hop acids are hexahydroisoalpha acids. Lutz discloses a method for inhibiting and controlling the growth of microbial organisms utilizing hop acids (paragraph 19). Lutz continues to disclose that the hop acids are mixed and incorporated with a detergent or cleanser and that the hop acid is a hexahydro-iso-alpha acid (paragraphs 6-15) that is particularly useful against microorganisms such as *Staphylococcus aureus* and *E. coli*, which are known types of bacteria in the food industry. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize hexahydroisoalpha acids in the method and product of Barney in order to inhibit microorganisms such as *Staphylococcus aureus* and *E. coli*, which are known types of bacteria in the food industry as exemplified by Lutz (For a more detailed explanation, please see the **Response to Arguments** section of this Office Action).

4. Claims 7 and 10, are rejected under 35 U.S.C. 103(a) as being unpatentable by Barney et al. (U.S. Patent No. 5,455, 038).

Barney is relied upon as set forth above. Barney does not specifically state that the food packaging material comprises a 2% by weight volume of a hop extract containing about 9% hexahydroisoalpha acids. However, it would have been well within the purview of one of ordinary skill in the art to optimize the weight volume and the percentage of hexahydroisoalpha acids in the packaging material in order to maximize the efficiency of the process as well as the inhibition of the microorganisms. Only the expected results would be attained.

***Response to Arguments***

5. Applicant's arguments filed November 8, 2007 have been fully considered but they are not persuasive.

*Applicant's principle arguments are:*

*(a) Barney I fails to teach or suggest that a hop acid could be incorporated into a food packaging material.*

Barney clearly discloses in column 2, lines 6-7 that, "the taste or flavoring of the particular food to which the inhibitor is to be added or which is to be wrapped in the packaging materials **containing** the inhibitor." Therefore, the packaging material contains the inhibitor. Furthermore, column 1, lines 60-65 states, "The preferred method of the present invention comprises incorporating a safe and effective amount of an inhibitor....into a medium to inhibit Listeria growth." Column 2, lines 12-15 define a medium is, "intended to include both solid and liquid foods, **as well as packaging materials** from which the inhibitor can be released to inhibit organisms on the surface of foods."

*(b) Applicants submit that one of ordinary skill would not be motivated to combine the teachings of Lutz (relating to personal care products) with the teachings of Barney I (relating to food treatment).*

Lutz describes various embodiments that the antimicrobial composition may be used in, wherein one or more of the embodiments relate to personal care products.

However, Lutz also provides an embodiment that is a method of killing and or inhibiting the growth of microorganisms on a substrate or in or on a product as disclosed in paragraph 19. Furthermore, the reference discloses a plurality of examples of a substrate wherein one of the examples includes food starches (paragraph 72). Furthermore, another embodiment is provided for inhibiting the growth of microorganisms and bacteria such as *Staphylococcus aureus* and *E. coli*, which are known bacteria in the food industry. Thus, it would have been obvious to one of ordinary skill to apply the composition of Lutz in the method of Barney in order to inhibit the growth of *Staphylococcus aureus* and *E. coli*, which are known bacteria in the food industry.

*(c) Applicants submit that one of ordinary skill would not be motivated to combine the teaching of Barney II (relating to feminine hygiene products) with the teaching of Barney I (relating to food treatment). As such, Applicants respectfully submit that any assertion of a combination of Barney I and Barney II is improper, and for this reason in and of itself, a prima facie case of obviousness is not established.*

Barney II is merely relied upon to disclose that hop acids are utilized against microbial organisms such as *Staphylococcus aureus*, and therefore Barney II provides evidence suggesting utilizing the hop acids of Barney I as well as Lutz against *Staphylococcus aureus*. However upon further examination, Lutz discloses that the hop acids are utilized in a method against the microorganism of *Staphylococcus aureus* (paragraph 86). Thus, a new rejection is provided.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin C. Joyner whose telephone number is (571) 272-2709. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
GLADYS JP CORCORAN  
SUPERVISORY PATENT EXAMINER

KCJ